

**Table 8**  
**Summary of AVS, SEM and Organic Carbon-Normalized Excess SEM Data for Wetland Sediment**

Location Sample Date Sample ID		EWSED01 8/12/2010 EWSED01	EWSED02 8/12/2010 EWSED02	EWSED03 8/13/2010 EWSED03	EWSED04 8/13/2010 EWSED04	EWSED05 8/12/2010 EWSED05	EWSED06 8/12/2010 EWSED06	EWSED07 8/13/2010 EWSED07	EWSED08 8/13/2010 EWSED08	EWSED09 8/13/2010 EWSED09	
Analyte	CAS No.	Units									
Acid-Volatile Sulfide	18496-25-8	μmol/g <sub>sed</sub>	0.018 J	< 0.005	< 0.004	0.05	< 0.004	0.33	< 0.004	2.04	< 0.004
Cadmium, SEM	7440-43-9_SEM	μmol/g <sub>sed</sub>	< 0.0006	0.0007	0.0011	0.0012	< 0.0005	0.0019	0.0008	< 0.0008	< 0.0005
Copper, SEM	7440-50-8_SEM	μmol/g <sub>sed</sub>	0.024	0.03	0.057	0.16	0.082	0.092	0.065	0.016	0.011
Lead, SEM	7439-92-1_SEM	μmol/g <sub>sed</sub>	0.015	0.029	0.038	0.088	0.055	0.04	0.037	0.021	0.009
Nickel, SEM	7440-02-0_SEM	μmol/g <sub>sed</sub>	0.015	0.03	0.012	0.016	0.011	0.019	0.015	0.028	0.005
Zinc, SEM	7440-66-6_SEM	μmol/g <sub>sed</sub>	0.148	0.259	1.55	1.02	1.74	3.79	0.617	0.255	0.039

AVS - acid volatile sulfides

SEM - simultaneously extracted metals

foc - fraction organic carbon (from total organic carbon values in Table 6)

If detected less than the detection limit, then the detection limit was used in the calculation.

ΣSEM	μmol/g <sub>sed</sub>	0.2	0.3	1.7	1.3	1.9	3.9	0.7	0.3	0.1
ΣSEM/AVS	---	11.3	69.7	415	25.7	472	11.9	184	0.157	16.1

For SEM/AVS ratios above 1.0, the potential exists for metal toxicity since sufficient AVS to completely form insoluble metal sulfides is not present. This excludes consideration of organic carbon (see below).

foc	g <sub>oc</sub> /g <sub>sed</sub>	0.0594	0.0273	0.0182	0.0167	0.0181	0.0215	0.0239	0.0468	0.0112
ΣSEM-AVS	μmol/g <sub>sed</sub>	0.185	0.344	1.654	1.235	1.885	3.613	0.731	---	0.061
(ΣSEM-AVS)/foc	μmol/g <sub>oc</sub>	3.1	12.6	90.9	74.0	104.1	168.0	30.6	---	5.4

For organic carbon-normalized excess ΣSEM ratios ≤130 μmol/g<sub>oc</sub>, the samples are predicted to be non-toxic; values between 130 and 3,000 μmol/g<sub>oc</sub> lie where the prediction of toxicity is uncertain; and values greater than 3,000 μmol/g<sub>oc</sub> are predicted to be toxic (EPA 2005).